

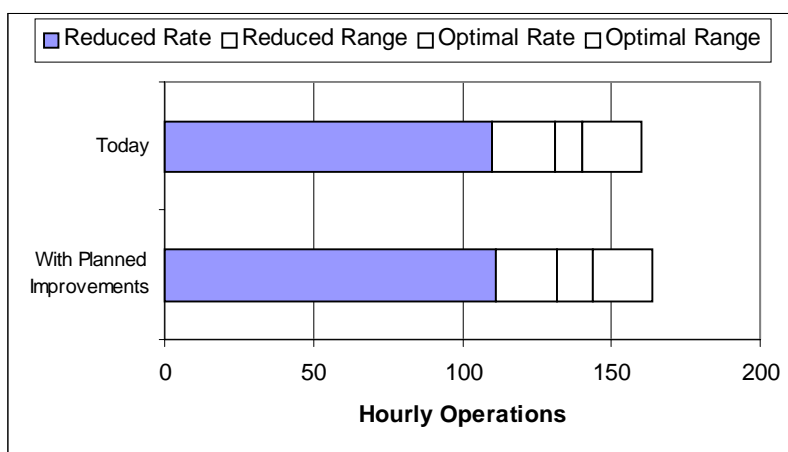
Pittsburgh International Airport Benchmarks

- The current capacity benchmark at Pittsburgh International is 140-160 flights per hour in good weather.
- Current capacity falls to 110-131 flights (or fewer) per hour in adverse weather conditions, which may include poor visibility, unfavorable winds or heavy precipitation.
- Although Pittsburgh has periods when scheduled operations exceed its good-weather capacity, the demand drops to very low levels in between the peaks, allowing the airport time to recover.
- Overall, less than 0.5% of the flights are delayed significantly (more than 15 minutes).
- Technology and procedural improvements are expected to improve Pittsburgh's capacity benchmark by 3% (to 144-164 flights per hour) over the next 10 years, while the adverse weather capacity will increase by 1% (to 111-132 flights per hour).
- These capacity increases could be brought about as a result of:
 - ADS-B/CDTI (with LAAS), which provides a cockpit display of the location of other aircraft and will help the pilot maintain the desired separation more precisely.
 - FMS/RNAV Routes, which allow a more consistent flow of aircraft to the runway.
- Demand is expected to grow by 15% over the next decade. Because capacity is not expected to keep pace with growth in demand, a modest increase in delay is likely.

Airport Capacity Benchmarks – These values are for total operations achievable under specific conditions:

- **Optimum Rate** – Visual Approaches (VAPS), unlimited ceiling and visibility
- **Reduced Rate** – Most commonly used instrument configuration, below visual approach minima

Scenario	Optimum Rate	Reduced Rate
Today	140-160	110-131
New Runway	N/A	N/A
With planned improvements	144-164	111-132



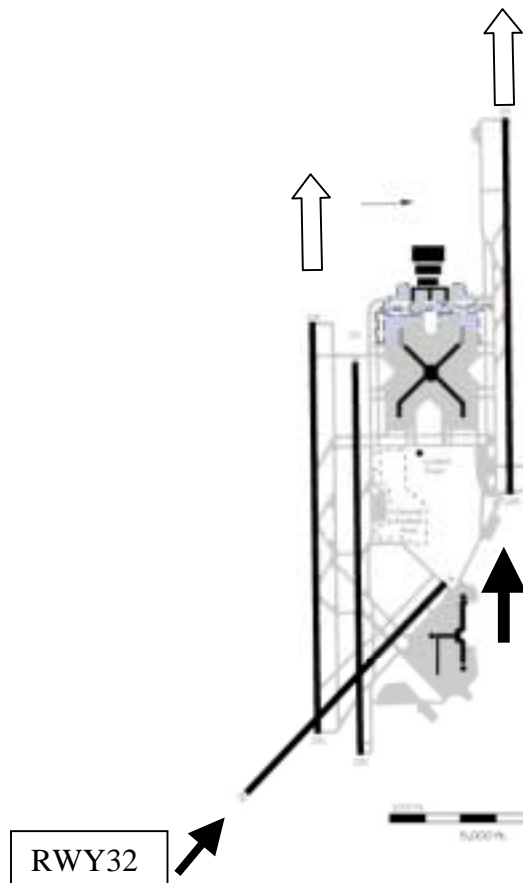
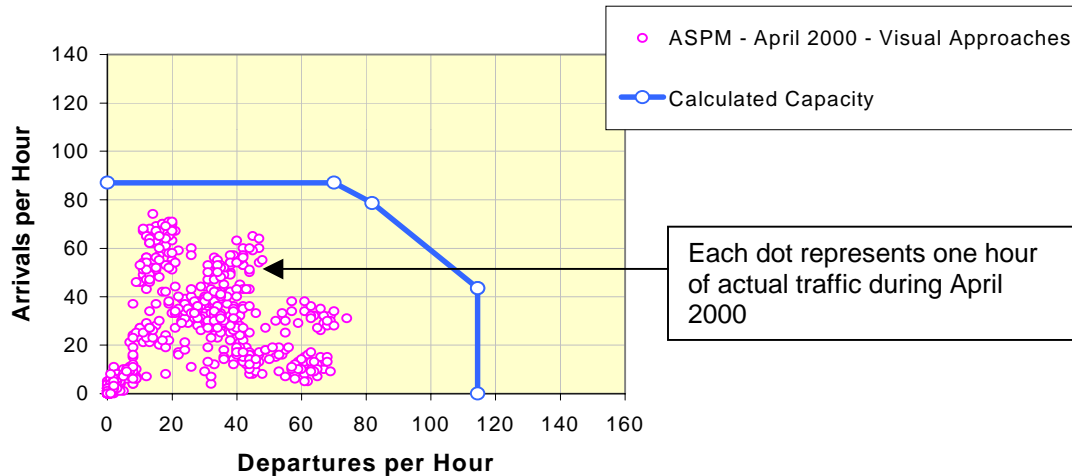
- The benchmarks describe an achievable level of performance for the given conditions, which can occasionally be exceeded. Lower rates can be expected under adverse conditions. Note: In some cases, facilities provided separate unbalanced maximum arrival and departure rates.
- Planned Improvements include:
 - ADS-B/CDTI (with LAAS) – provides a cockpit display of the location of other aircraft. This will help the pilot maintain the desired separation more precisely.
 - FMS/RNAV Routes – allows more consistent delivery of aircraft to the runway threshold.
- Benefits from Planned Improvements assume that all required infrastructure and regulatory approvals will be in place. This includes aircraft equipage, airspace design, environmental reviews, frequencies, training, etc. as needed.
- **Note:** These benchmarks do not consider any limitation on airport traffic flow that may be caused by non-runway constraints at the airport or elsewhere in the NAS. Such constraints may include:
 - Taxiway and gate congestion, runway crossings, slot controls, construction activity
 - Terminal airspace, especially limited departure headings
 - Traffic flow restrictions caused by en route miles-in-trail restrictions, weather or congestion problems at other airports

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the individual programs.

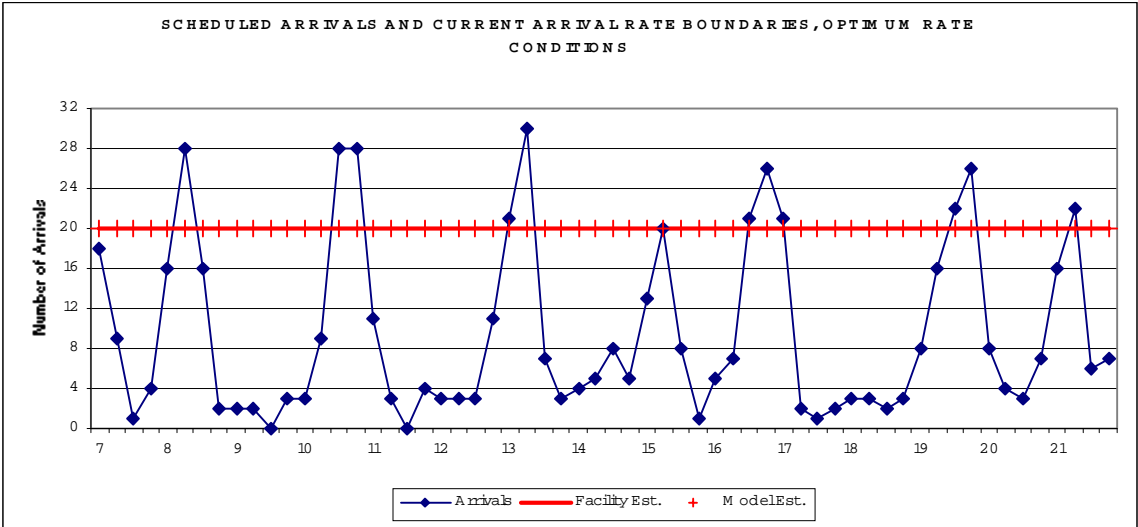
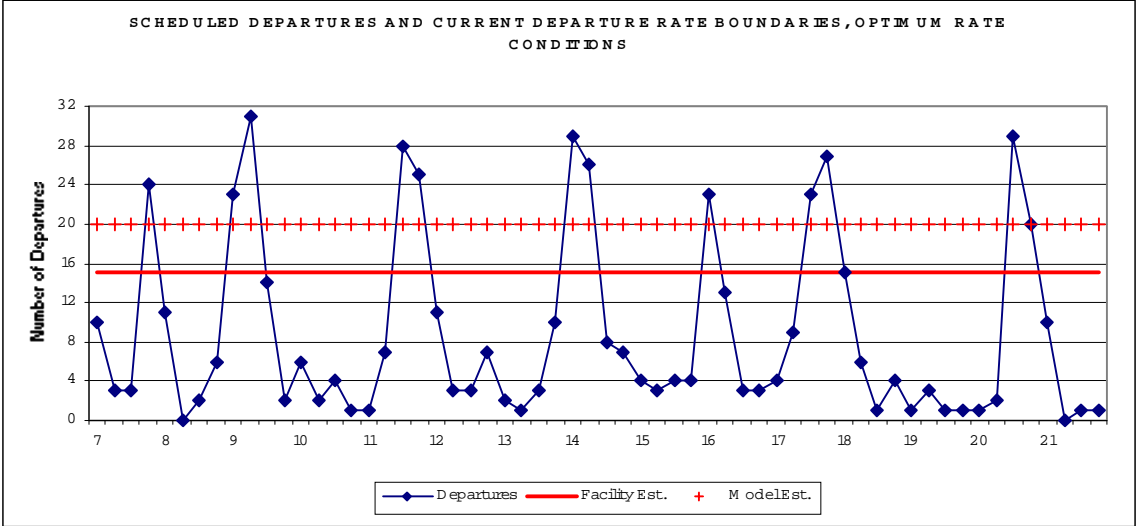
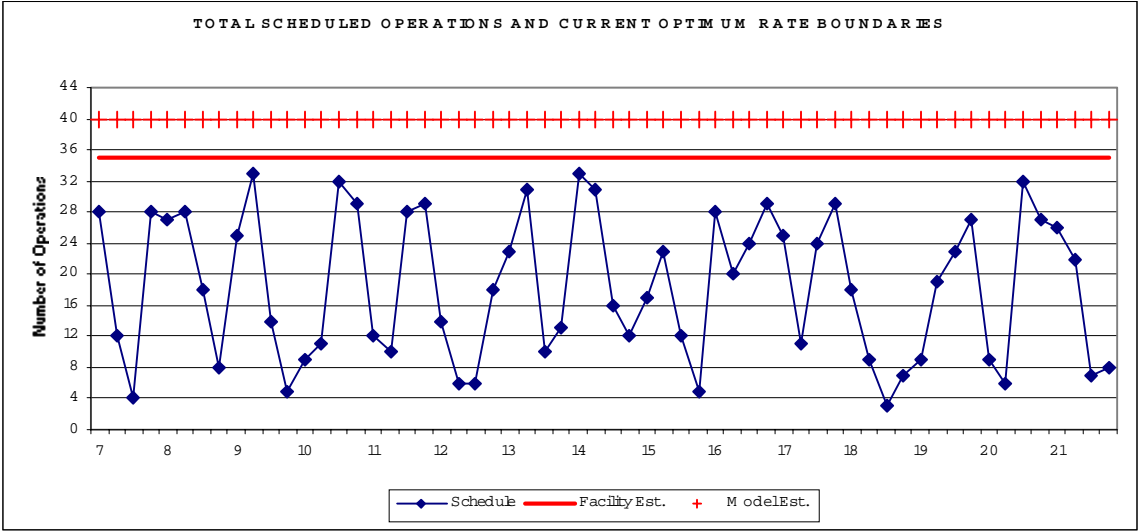
The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

Current Operations – Optimum Rate

- Visual approaches, visual separation
 - Facility reported 80 max AAR, 100 max ADR, with a maximum of 140 total ops.
 - RW32/28LR is RWY configuration reported by facility.
- ASPM data is actual hourly traffic counts for April 2000
- Chart below represents observed hourly traffic and expected rates in terms of operations per hour. Solid line represents the expected limit of hourly operations. Per facility reported optimal operations, arrivals were modeled on RWY32 & 28R, departures on RW28LR.

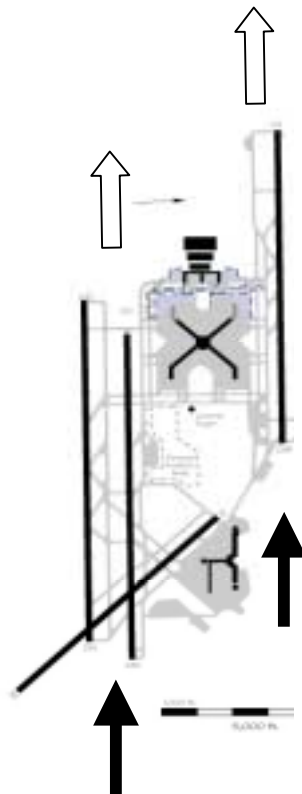
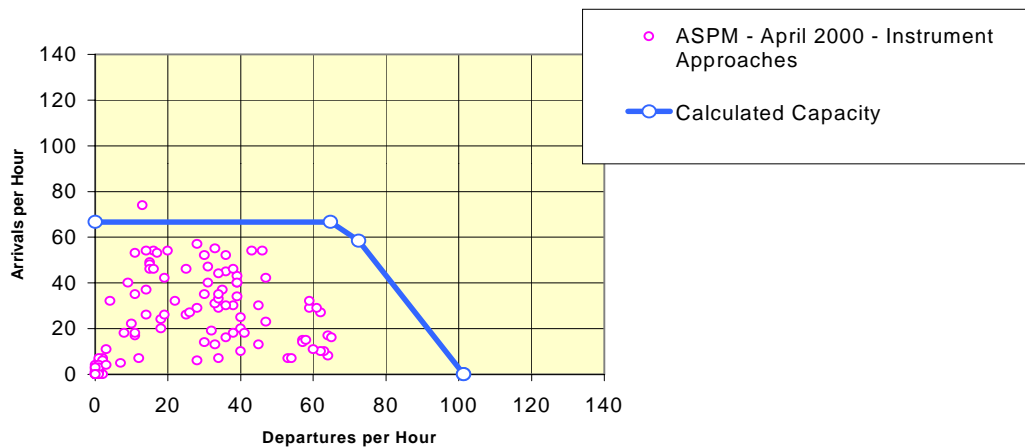


Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Optimum Rate Conditions



Current Operations – Reduced Rate

- Instrument approaches (below Visual Approach Minima)
 - Facility reported 65 max AAR, 90 max ADR, with a maximum of 110 total ops.
 - RW28LCR is RWY configuration reported by facility.
- ASPM data for “Instrument Approaches” can include marginal VFR, with higher acceptance rates
- Chart below represents observed hourly traffic and expected rates in terms of operations per hour. The three parallel runways 28LCR have been modeled.



Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Reduced Rate Conditions

